

Claims

- [c1] What is claimed is:
1. A digital camera comprising:
an image sensor system for providing n pixels of initial image information, each pixel having m bits of intensity information for only one color selected from a group of at least three component colors so that the initial image information comprises $n \times m$ bits;
a first compression system for compressing the $n \times m$ bits of the initial image information into r bits of secondary image information, wherein r is less than $n \times m$;
a frame buffer of at least r bits for storing the secondary image information;
a first decompression system for decompressing the r bits stored in the frame buffer to provide tertiary image information; and
an image processing system for accepting the tertiary image information to generate processed image information comprising a plurality of pixels, each pixel of the processed image information providing intensity information for each color in the group of at least three component colors.
 - [c2] 2. The digital camera of claim 1 wherein the image information consists of $n \times m$ bits.
 - [c3] 3. The digital camera of claim 2 wherein the tertiary image information consists of $n \times m$ bits.
 - [c4] 4. The digital camera of claim 1 further comprising a line buffer for storing a plurality of lines of the tertiary image information and providing a block of serialized tertiary image information to the image processing system.
 - [c5] 5. The digital camera of claim 4 wherein the image sensor system is an interlaced sensor system, and the line buffer is used to de-interlace the tertiary image information.
 - [c6] 6. The digital camera of claim 4 further comprising a block-based lossy image compression system for compressing a block of processed image information to provide compressed image information to a permanent storage system of the

